© The Author, 2017. Journal compilation © Australian Museum, Sydney, 2017 *Technical Reports of the Australian Museum, Online* (2017) No. 26, pp. 1–8. ISSN 1835-4211 (online)

https://doi.org/10.3853/j.1835-4211.26.2017.1701 Paul Flemons D orcid.org/0000-0002-8261-1942

The Australian Museum Lord Howe Island Expedition 2017—Introduction

PAUL FLEMONS

Australian Museum Research Institute, Australian Museum, 1 William Street, Sydney NSW 2010, Australia

ABSTRACT. In early 2017, as part of the Australian Museum 190th anniversary celebration, the Australian Museum (AM) undertook an extensive expedition survey program on Lord Howe Island (LHI) that included marine and terrestrial sampling of vertebrates and invertebrates and an ambitious terrestrial invertebrate survey of Balls Pyramid, the last remaining wild refuge of the Lord Howe Island phasmid (or stick insect). The outcomes of this expedition are detailed in the papers compiled in this special edition.

KEYWORDS. Lord Howe Island; Balls Pyramid; Australian Museum

FLEMONS, PAUL. 2017. The Australian Museum Lord Howe Island Expedition 2017—introduction. *Technical Reports of the Australian Museum, Online* 26: 1–8. https://doi.org/10.3853/j.1835-4211.26.2017.1701

In early 2017, as part of the Australian Museum's 190th anniversary celebration, the Australian Museum (AM) undertook an extensive expedition survey program on Lord Howe Island (LHI) that included marine and terrestrial sampling of vertebrates and invertebrates and an ambitious terrestrial invertebrate survey of Balls Pyramid.

Lord Howe Island is situated 570 km east of Australia and 1350 km northwest of New Zealand. The island is volcanic in origin, sitting on a fragmented arc split off the eastern margin of Australia. It is at least seven million years old (McDougall *et al.*, 1981) and is the eroded remnant of a much larger land mass connecting Lord Howe Island with Balls Pyramid (McDougall *et al.*, 1981). Lord Howe Island is 11 km long and 2.8 km at its widest, and is dominated by two large mountains, Mount Gower (875 m) and Mt Lidgbird (777 m), on the southern end of the island.

Lord Howe Island is one of only five oceanic islands on the World Heritage Register. It was listed in 1982 in recognition of its unique biota and its diverse and largely intact ecosystems and habitats for threatened species, including the world's southernmost coral reef. The fauna and flora of Lord Howe Island is of particular biological interest because of its diversity and high levels of endemism. The

age of the island, its protected status, its remote location and the fact it wasn't settled until 1834 has left it as one of the least modified of the few islands located at this latitude in the Pacific Ocean. Diverse biogeographical relationships are represented on the island, with different components of the fauna showing affinities with New Zealand, Australia and New Caledonia (Green, 1994). The island is 85% natural forest, of which 75% is preserved as Permanent Park Preserve. The remaining 15% has been cleared for housing, grazing and transport.

The AM has conducted over 50 expeditions since the AM was founded in 1827, and has a long and valued history with Lord Howe Island (see numerous works listed in Reference section). The Museum's first multidisciplinary expedition to Lord Howe Island took place in 1887, the findings were published in *Australian Museum Memoirs* no. 2 (Etheridge *et al.*, 1889). Since then there has been many publications by Australian Museum staff detailing marine and terrestrial fauna of Lord Howe island (see Reference section). Perhaps the most significant of these is the "Recher Report" (Recher & Clarke, 1974), a book that details the most extensive environmental survey ever undertaken on Lord Howe Island. The survey, between the years of 1969 and 1973, looked at